FRMO Corporation Annual Meeting of Shareholders
Thursday, September 8, 2022

Operator

Welcome to the annual meeting for FRMO Corp. Our host for today's call is Thérèse Byars, Corporate Secretary. At this time, all participants will be in a listen-only mode. I will now turn the call over to your host. Ms. Byars, you may begin.

Thérèse Byars – Corporate Secretary

Good afternoon, everyone, and welcome to the FRMO 2022 Annual Meeting of Shareholders. My name is Thérèse Byars and I am the Corporate Secretary of the company. We are hosting our third virtual-only annual meeting, which allows us to reach a greater number of our shareholders. In the future, we plan to combine in-person meetings with virtual, so we'll enjoy the benefits of both.

Now, a bit of housekeeping. Please note that this meeting is being recorded; however, no one attending by the webcast or telephone is permitted to use any audio recording device to record the meeting. A replay will be available for one year using the same access link that you used to join this meeting. One other housekeeping note to make is that in Mr. Stahl's and Mr. Bregman's Letter to Shareholders, there is a typographical error on page 7 in the third full paragraph. It describes the number of shares FRMO owns, directly and indirectly, of Texas Pacific Land Corp. (TPL). However, the number that was presented was only for direct ownership of 7,408, but the total for direct and indirect shares owned by FRMO should be 51,705.

As is our custom, we will conduct the business portion of our meeting first. Mr. Stahl and Mr. Bregman will answer questions at the end. We might not be able to answer every question, but we will do our best to provide a response to as many as possible and we will endeavor to address unanswered questions in the summary transcript. We have received several in advance, but only validated stockholders may ask questions today in the designated field on the web portal. The FRMO Annual and Quarterly Report, as well as the corrected version of the 2022 Letter to Shareholders can be viewed on our website, at frmocorp.com. These items can also be viewed on the FRMO listing on the OTC Markets website by clicking on the disclosure tab.

It is now shortly after 3 p.m., and this meeting is officially called to order. It is my pleasure to introduce FRMO's nine directors, all of whom are candidates for reelection. They are Murray Stahl, Steven Bregman, Peter Doyle, Lawrence J. Goldstein, Allan Kornfeld, Jay P. Hirschson, Alice C. Brennan, Herbert M. Chain and Dov Glickman. Also present at this virtual meeting from our auditors, Baker Tilly US, LLP, are John Basile and Patrick Warch. They will be available during the question-and-answer session after the formal meeting, to respond to appropriate questions.

We now proceed to the report on the tabulations of the proxies for the two proposals. The Proxy Committee, appointed by the FRMO Board of Directors, is here this afternoon to represent those shareholders who gave their proxies to the Committee. The Board of Directors fixed July 25, 2022 as the record date for determining the stockholders entitled to vote at this meeting. An affidavit has been delivered attesting to the fact that the Notice of the Meeting, the Proxy Statement, and the Proxy Card were mailed on or about August 8, 2022.

The stockholder list shows that as of the record date, there were 44,017,781 shares of common stock outstanding and entitled to vote at this meeting. The Inspectors of Election Report that proxies were received from FRMO shareholders, holding approximately 36.7 million shares of common stock, or 83.4% of the voting power on the record date. Therefore, this meeting is properly organized with a quorum present, and we may proceed.

There are two items of business for this meeting. The first is the election of the nine directors who were nominated in accordance with the company's governing documents. The second is the proposal to ratify the appointment of Baker Tilly US, LLP as the independent registered public accounting firm of the company for the fiscal year ending May 31, 2023. The Board recommends a vote for both items.

It is now 3:06 p.m. on September 8, 2022, and the polls are still open. Any stockholder who has not yet voted or wishes to change their vote may do so by clicking on the “voting” button on the web portal and following the instructions. If you have already submitted your proxy, you do not need to vote again, unless you wish to change your vote. I'll wait a moment to give people a chance to vote.

Now that everyone has had the opportunity to vote, I declare the poll for the 2022 FRMO Corp. Annual Meeting of Shareholders closed at 3:07 p.m. on September 8, 2022. Based on the preliminary report of the Inspectors of Election, all nine director nominees have been duly elected to the Board, with all nominees receiving 99.7% of the votes cast and 83.2% of the shares outstanding. The proposal to ratify the appointment of Baker Tilly US, LLP as the independent registered public accounting firm of the company for fiscal year ending May 31, 2023 has been approved with approximately 99.7% of the votes cast and 83.2% of the shares outstanding.

There being no further business to come before this meeting, the formal part of this FRMO Corp. 2022 Annual Meeting of Shareholders is now adjourned.

The next item on our agenda is the Chairman's Report to the Shareholders. Joining me on the line are Murray Stahl, Chairman and Chief Executive Officer, and Steven Bregman, President and Chief Financial Officer. Mr. Stahl will review key points related to the 2022 financial results. When he finishes his remarks, he and Mr. Bregman will answer questions. At that time, we will begin with the questions that we received in advance of today's meeting. We will then take questions as they are entered on the web portal. We will answer as many as time allows, but only those that are germane to the meeting will be addressed. As noted earlier, unanswered questions will be addressed in the summary transcript that will be posted on the company's website.

With that, I'll turn the meeting over to the Chairman of the Board, Mr. Murray Stahl.

Murray Stahl – Chairman & Chief Executive Officer

Thank you, Thérèse, and thank you, everybody, for joining us today. I will try to keep it brief, because I think there are a lot of questions, and we want to make sure we get to all of them. I'll give you some highlights and I'll pick up from where we left off in the Shareholder Letter. The Shareholder Letter concerns itself largely with our strategy to build our cryptocurrency business. We touched on some other points, but only briefly, so I want to cover two aspects that I should, in retrospect, have addressed more fully in the Shareholder Letter, and this is as good of a place as any.

As a point of departure, one of the important implications of crypto, as you'll see in a moment, relates to more than just the crypto blockchain or its status as a currency narrowly; it relates to cryptocurrency at large and even society at large. The blockchain represents the movement from a hierarchical society to a decentralized society. What's meant by that, and why is it so important?

Try to visualize this if you will: Imagine you were walking by a 25- or 30-story apartment building that was under construction. And you were thinking about the energy system—the electrical wiring, the air conditioning, the heating elements—and wondered what the blueprints or schematics for that system would look like. Remember, we're not considering the plumbing. We're not considering the roofing or the foundation or the structural supports, just the energy system.

Think of how many pages there would be. I dare say it would probably be hundreds of pages just for that element of the building. Probably a dozen people drafted those documents. Those dozen people had to liaise with the municipality in which the building was being built, to see if it's approved and if it conforms to the various municipal building codes. They would have to liaise with the fire department, because there's a separate fire code, and there are fire marshals and inspectors who conduct separate inspections. There, of course, would be inspections during construction to make sure it conforms with the already-approved building codes.

And if you thought a little further about it, about the people at the so-called policy-making level of the building, those who decided to build it—maybe it's a board or the management of an REIT—really know very little about the energy system of the building. Imagine how complex it is, how little the policy-making level knows about it. And with that thought, think about the way information flows. Information is not necessarily, with regard to energy, flowing down from the management to the people designing the energy system. It actually flows up, because the people at the bottom, the non-policy-making level, have a lot more knowledge about designing energy systems than the management could ever have. And then, as the building is built, there may be circumstances where the pre-approved plans, as a practical matter, might not be implemented because some portion of it might conflict with the installation of the elevator system or the plumbing system or the emergency stairways, and so on and so forth, and therefore changes need to be made to the plan. All of that is made at the lower levels. Just to build an apartment building, information is flowing in a very different way than you would think it would expect.

Now, that's just the energy system of one small building by contemporary standards. Consider how complex the *global* energy system is, and all the people needed for input in that process. Now you can better understand the need for a cryptocurrency. It's because everybody who is a participant in society must have knowledge about what the currency is actually doing and how many units of currency will be outstanding at any point in time, so that they can make long-term plans. They can't make long-term plans without knowing what the inflation rate of their currency is going to be. If they don't know what the inflation rate is going to be, because that has yet to be decided by the central bank authorities, they're not in a position to make rational decisions, and capital will not flow to where it's needed. That basically explains the need for a blockchain and a cryptocurrency. It's a fixed-issuance means of transacting, which is very different from anything society has ever undertaken. That's why it's so important and is such a focus for us.

I could have written the Shareholder Letter in a completely different way by taking the same principles and applying it to the Horizon Kinetics active management business, because, as you know, the great struggle in investment management—certainly for the last 14 years, maybe longer—is a struggle between active management and passive management.

We, of course, are firmly in the active camp. For probably 12½ of those 14 years, active management was, I would say most assuredly, on the defense. It's only in the last, perhaps, 18 months that active management can talk about a variety of successes. One such success, apart from investment performance, is that Horizon Kinetics, as of the most recent reckoning, has $6.8 billion of assets under management, which for us is a decent-sized increase.

But the struggle between passive (or indexation) and active management is much more profound, so I'll just give you two points related to it. One is philosophical, but actually has to do with the functioning of the economy. And then we'll go to questions-and-answers.

You can see that I have very, very positive expectations for active management. The first point is the basic idea that passive management presumes, under the theory of market efficiency, that within reason, everything that could be known about the prices of securities is already reflected in those prices. Therefore, active managers add no value, so the bulk of the assets in the world should be passive. And we've certainly moved in that direction in the last 14 years; that's actually happening.

The paradox is, if you remove the active managers—and for 14 years, that's what's been happening, removing funds from the active managers—they are the element that makes the market efficient, they're the ones who are sensitive to, whether right or wrong, pricing and valuation. An index doesn't even see valuation, it's not in an algorithm. If you remove the active managers, how can the market be as efficient as it once was? Therefore, the market has to assume a certain amount of inefficiency, maybe not with regard to every security, but certainly in sectors.

And that's what we've found at Horizon Kinetics. There are all sorts of pockets of opportunity. I wouldn't say it exists in every segment of the financial marketplace, but there are now pockets of opportunity that we wouldn't have believed were even conceivable not that long ago. So, just by that alone, we're looking forward to some very, very interesting times in the future. But there's a much larger question that relates to the economy.

The structure of passive management is that capital or money flows in accordance with a preordained formula, the indexation formula, which is that the weighting of the companies is based on market capitalization, adjusted for the float. As a generalization, the money is flowing to the largest, most liquid companies. The problem with that is the largest and most liquid companies already have the most capital. They are the most financially endowed, and have the least need for capital; in fact, they don't need any more. And the smaller companies that are looking to grow and expand—some have good ideas, and some have not-so-good ideas—have been crowded out, excluded from that external capital. But the indexation structure guarantees that funds will flow to those enterprises least in need of capital, to the big companies, while funds will not flow to those companies that actually need it.

That means that all sorts of things that could be developed or built, which presumably could serve human needs in society, are not being served. Ultimately, that misallocation of capital creates problems in society. One of those challenges we've managed to exploit these last couple of years is in the energy sector—who would have believed just a couple of years ago that we really are transitioning to green energy, that we actually have a shortage of conventional or fossil fuels? We wouldn't have believed such a thing was even conceivable, yet here we are. That doesn't mean this circumstance will last forever, and it doesn't mean it's not a solvable problem, but for the moment at least, and maybe beyond the moment, there's a deficiency of capital that should have flowed to a certain area, where there is certainly a need. It did not flow to that area and it's not likely that it's going to. And all sorts of unpleasantness with regard to inflation necessarily follows from that.

Now you understand what we're doing in the investment management sense. And I hope you better understand from the Shareholder Letter what we're doing in the cryptocurrency sense. And without further ado, I think rather than wax philosophical, I'll just turn it over to questions-and-answers. We'll do our best to answer every single question we get.

Thérèse, if you please, maybe you could read the questions. I certainly don't know what the questions are going to be, but I'll be glad to answer whatever I can.

Thérèse Byars – Corporate Secretary

It will be my pleasure.

Questioner 1

I keep seeing the name Horizon Common show up in SEC filings along with FRMO and the RENN fund. Would Murray explain the relationship between FRMO and Horizon Common?

Murray Stahl – Chairman & Chief Executive Officer

Horizon Common is one of two companies that was created to facilitate the merger of Horizon and Kinetics. It might be recalled that for a number of years, Horizon Asset Management and Kinetics Asset Management were separate companies that had many of the same employees and everyone always said "That's ridiculous. Why don't you just merge them?" And we finally got around to merging them.

The problem is, when you merge two investment management companies into one, there's a lot of goodwill associated with a transaction like that, because there aren't very many hard assets, so if you don't do it very carefully, you're going to have a very large tax bill. So, what was done is that the shares we ended up owning of Horizon Kinetics were owned in certain portions by Horizon Common and by Kinetics Common, which own the bulk of Horizon Kinetics. We own some shares individually and FRMO owns a little bit less than 5% of the shares, if I have that number right. That's basically the origin of Horizon Common. So, they're private companies. There's no reason to take them public. Basically, they're holding companies for different shares of Horizon Kinetics, so I think that's the simple answer to the question.

Thérèse Byars – Corporate Secretary

The next few questions are specific to the financial statements.

Questioner 2

Can you provide some detail on the big drop in equity earnings from limited partnerships and LLCs?

Steven Bregman – President & Chief Financial Officer

The answer lies almost implicitly in the category, "Earnings from Limited Partnerships and LLCs." Bear in mind, in the language, that we're really talking about investment vehicles that have incentive fees. Obviously, those kinds of fees can be very volatile all on their own in their natural state, and the term "lumpy" is often used in the industry. The earnings from this category also reflect other data and accounting entries for realized gains and losses on investments, but also, there's an accounting element to it under GAAP that can exacerbate the lumpiness. That includes changes in required estimations of what incentive fees for a given year might be, even before one knows what they are, and so those estimations or accruals often have to be changed in the following period, sometimes reversed. They're different than what most of us consider actual earnings to be, just in the normal manner of thinking about earnings.

We'll cover this in more detail, I think, for some related questions coming up. But just by comparison, if you look at the revenue participation fee that FRMO earned from Horizon Kinetics, that's not so volatile, and it didn't drop for the 12 months ended March 31, 2022. FRMO earned $2.884 million from the revenue participation, which was a bit higher than the $2.335 million that it earned for the 12 months ended March 2021. Those were reported in the FRMO fiscal year ended in May. There's the two-month reporting lag, but that'll give you a sense of the difference between that kind of figure and the earnings from partnerships. So, you're dealing with hedge funds or partnership funds with incentive fees.

Questioner 3

In Note 4 of the 10K, it states that 62% of the fees in the income statement are due to the Horizon Kinetics revenue share. Would you explain where the remaining 38% of the fees are sourced?

Steven Bregman – President & Chief Financial Officer

Substantially, all of the rest, about 35 percentage points, was from cryptocurrency mining revenue. And there was another few percent from rental income, and a bit less than 1%—you might find this interesting even though it's de minimis—was from MGEX, the Minneapolis Grain Exchange, which was merged into the MIAX Exchange Group. That represents the MGEX director fee that would ordinarily be due to Mr. Murray Stahl, but he has from the start disclaimed that director's fee in favor of FRMO Corp., so that gets noted in the financial statement.

Questioner 4

Thank you for disclosing select information relating to Horizon Kinetics in Note 5. It seems odd that revenue would have halved from over $80 million in 2021 to $40 million in 2022, when the latter year would include the success that has been the Inflation Beneficiaries ETF. Would you speak to the change in revenue for Horizon Kinetics for these two years?

Steven Bregman – President & Chief Financial Officer

We received a number of questions about this, and it's perfectly reasonable that we should. They come about from the process of trying to provide more information. In Note 5 of this year's filing, there is now additional information about operations and results and balance sheet figures at Horizon Kinetics itself. In providing that information, those questions reveal that we could have been a little clearer if we had provided just a bit more data for some context around the new information.

Let me talk about it this way: There are two languages here to interpret, such as what an item like revenue is. There's the GAAP accounting version, and then there's the ordinary day-to-day cash basis thinking. Most of us think in terms of revenues that are earned at the time of sale. GAAP tries to match the revenue to the various prior or future periods during which it was in the process of being earned or will be earned. For ordinary management fees such as the HK investment advisory fees or mutual fund fees, those are usually taken monthly, so there isn't any adjustment to make, except maybe at the end of the year, since December's fee might not be collected for some period of days or a week or two or three. But for an incentive fee that's to be received after the end of the year, GAAP accounting requires prior entries, quarter-by-quarter estimates of what those incentive fees would be. But obviously, those are subject to revision once the year is complete.

You don't really know what the performance will be, so given the multiplier effect on earnings from incentive fees anyway, since they are at least 20x the rate of management fees, and given ordinary market volatility, the adjustments to what so-called revenue is determined to be can be quite large. Accordingly, the major variances in the published results are from accounting for the hedge fund or partnership incentive fees.

I'd like to give you a sense of that. I'm going to read you a handful of figures, not that many. Although they won't let you necessarily reconcile these numbers exactly, they'll give you a sense of just how distorting this process can be. The best place to start might be with the assets under management, AUM, since this is what the fee structure is rendered upon. For Horizon Kinetics, for the 4th quarter of 2020, which would be December 31st, the AUM for regular investment advisory accounts, the mutual funds and ETFs, was $4.2 billion. For the year 2021, the following year, it was $5.9 billion. And just to bring us up to date, as of June 30th, as Murray said earlier, it's slightly higher. Rounded, it's still $5.9 billion. That's our so-called conventional assets: $4.2 billion at the end of 2020, $5.9 billion at the end of 2021, and now it's still $5.9 billion.

In those same periods, for what are called the alternatives, those kinds of equity partnerships and whatnot, AUM was $0.6 billion, then $1.0 billion for the year of 2021 and then $0.9 billion, more or less the same, currently. So, conventionally, alternatives AUM rose over the course of 2021, and they're flat so far this year. The alternatives are roughly 15% the size of the conventional AUM. So, they expanded quite a bit in 2021.

Now for the revenues. First, I'll read the fees as I did before. The fees from the conventional AUM of the investment advisory accounts, mutual funds, and also the management fees; not the incentive fees, but the management fees on the hedge funds. There are a variety of fees that are categorized as part of something called Other Revenue, which are pretty small relative to the total, although it's getting larger. Other Revenue includes certain research fees and, within the past year, a new category for Horizon Kinetics, which is ETF management fees.

For the four quarters ended in the 4th quarter of 2020—that doesn't conform to the FRMO fiscal year, but I just want to go through it this way—the fee revenue, excluding incentive fees, was about, give or take, $34 million. For the four quarters ended calendar 2021, the following year, it was $54.8 million. And if we take the four quarters up through this past June, that's $57 million. So, pretty steady. It kind of matches the AUM progress, as it should. On the other hand, if we look at the incentive fees, first I'll give you the full calendar year, which relates to HK, and then I'll give the fiscal year of FRMO Corp., for which we're using a different combination of quarters.

For the four quarters through December 2020, incentive fees at the HK level were about $13 million. For the year ended 2021, it was about $16 million. Now, again, those are full HK calendar years, and they seem to make sense, relative to the AUM pattern. In terms of magnitude, they're about 30% or more of the size of the conventional AUM fee revenues.

But relative to the FRMO May fiscal year, here are the four-quarter incentive fee revenues, which are based on results through the Horizon Kinetics quarters ended March 2021 and March 2022, because those are what get included in the FRMO May fiscal year. There's a two-month lag.

For the four quarters to March 2021, the incentive fee revenue at Horizon Kinetics was about $45 million. For the four quarters ended March 2022, the incentive fees were minus $15 million, so a $60 million swing. The incentive fees under accounting practices swung from $45 million to negative $15 million. Obviously, we didn't pay out $15 million in negative incentive fees to our hedge fund limited partners. That was an adjustment to the prior year's estimate, which is required under GAAP accounting. And of course, you can't know what the performance will be, but the estimate must be made. That's what accounts for the apparent swing in revenues from $80 million to $40 million.

So, aside from the natural changeability or lumpiness in when incentive fees are earned on a cash basis view, this can be made more extreme by accrual accounting, where some estimate has to be made for some level of fees and then has to be adjusted, possible reversed. Anyway, that's as good as I can do without providing a schedule of all the actual accrual entries, which frankly, I can barely understand when I look at them.

Thérèse Byars – Corporate Secretary

Thank you for that, Steven. The next questions are related to what you were just speaking about and kind of combines them.

Questioner 5

From Note 4, $2,884,000 in fees is 4.199% of revenues from Horizon Kinetics for 2022. This should imply Horizon Kinetics revenues of $68,683,019 for 2022, but Note 5 states HK revenues of only $40,818,000. Is there a missing step in my assumption, and could you provide details to reconcile these two numbers, please? I'm trying to understand why revenues went from a base of $43 million to $45 million to $81 million and back down to $40 million.

Steven Bregman – President & Chief Financial Officer

This relates to a portion of the prior question, and the answer is, yes, there is a missing step in the shareholder's question, which is the accounting for the incentive fees. The HK revenue, subject to the Revenue Sharing Agreement, includes about $30-odd million of crystallized fees. Plus, there were a few million dollars of adjustments between prior period accruals for the beginning of the fiscal year and what the final figure was.

What I'm going to suggest is that in our next presentation of Horizon Kinetics data, where it says "revenue," yes, the questioners are correct. You can't reconcile and understand how on God's green Earth can you go from $40 million in revenues to $80 million in revenues to $40 million revenues, and it doesn't seem to comport with the assets under management progress. What's missing there, we'll provide that, a line, or if necessary, two lines, to give a better sense of it; we'll find some way to show what the so-called incentive revenues were.

And again, when you look at them, even those figures might look kind of odd, but you should understand that while those are going to display extreme swings, they should enable you to reconcile between a preliminary revenue number and back out the incentive fee figure to arrive at a figure that will make better sense. We'll do that next time.

Questioner 6

Would you please briefly describe the nature of the securities being sold short, as described in "securities sold not yet purchased?"

Murray Stahl – Chairman & Chief Executive Officer

Yes, I'll take that.

Basically, with some very few exceptions, they are what's called path-dependent ETFs. What's path dependent? I don't know if you're familiar with the term, but basically, they are ETFs that essentially own futures, so they need to be formulaically rebalanced every day. That process of formulaic rebalancing pretty much makes it—I don't want to say a certainty, but very, very close to a certainty—that in the fullness of time (in this case being about three-plus years), that security will lose about 99% of its value.

Most days, we're selling short those securities. It's almost like a funding source for us. It's a very, very tiny amount, small enough that it doesn't even matter, and perhaps we shouldn't even be short that much. Maybe one day we'll get around to covering it, but it's irrelevant.

You probably want to know the ticker symbols of the path-dependent ETFs, but I'd rather not give them out, so I'll just mention the categories, if that's acceptable. For a path-dependent ETF, the more volatile the underlying asset is, the more the NAV declines. There's a decided reason for that, and maybe if we have time, I'll go into the math of it, but the two most volatile assets that we can find are precious metals and the volatility asset classes. So, we're short various kinds of path-dependent ETFs dealing with precious metals, and we're basically short various ETFs that deal with volatility as an asset class. That's almost all of it.

Thérèse Byars – Corporate Secretary

The next question is related.

Questioner 7

There is a desire for products to produce yield. Mr. Stahl has discussed shorting path-dependent ETFs and lending bitcoin as possible ways to generate yield. Does he have any thoughts or updates that he can share?

Murray Stahl – Chairman & Chief Executive Officer

On the lending of bitcoin, I have not really decided how great an idea that is. I own a couple of bitcoin directly, and I figured, I might as well risk my money first. So, I personally have lent a few bitcoin out, and my experience has not been bad. I've gotten a yield of about 4% out of it. I'm not 100% sure it's a risk-free undertaking and I have to study it more before I'll commit anybody else's money to it, but I will say so far, my experience with it has been generally good.

Regarding the path-dependent ETFs, it could be done in theory. The problem is, we'd have to control the admission and do it very carefully, because selling short path-dependent ETFs does not always produce a positive interim return, although in the fullness of time, it's always a good idea. But there are times you should do it and there are times you should not do it, if you want to avoid big, adverse swings in market value. We'd have to find a fund that would allow us to restrict admissions at certain points in time that only we can decide, and we'd have to restrict redemptions at certain times as well. I'm not sure we can find enough participants who are willing to accept the restrictions we're likely to place on it, so I'm still thinking through those issues. But in theory, it's possible to do it.

Questioner 8

The next question is also about the path-dependent ETF strategy. It appears from the balance sheet and cash flow statement that the activity on the path-dependent ETFs has been significantly reduced. Is this strategy being wound down?

Murray Stahl – Chairman & Chief Executive Officer

No, it's not being reduced, at least not in the conventional active way. The only bad aspect of the strategy is that the highest return you can make on a short is 100%, so we get to the point where we have a 99.999% profit. It doesn't take long before what might have been a meaningful-enough position size becomes very small if it's not added to with additional short sales. There are certain times, though, when we would cover some shorts, if we had an offsetting loss in some other security, as a way of realizing the profit without paying taxes.

You'll will sometimes see realized losses. But those pertain largely to the cost of hedging short positions. There was a time when we didn't engage in a lot of hedging. Now, we're something like 99.99% hedged. So, the hedges usually are just that; they're just insurance, and we end up losing money on those positions, so at some point in time, rather than let the loss go, and not take advantage of it, we'll cover some shorts. At the moment, though, we're increasing our short positions, so there is no thought of winding the strategy down.

Questioner 9

Are you able to discuss the holdings that are in Horizon Kinetics Hard Assets II, as well as the strategy for that fund, as opposed to the other funds' holdings and strategies, including the Inflation Beneficiaries ETF, Hard Assets I and the RENN Fund?

Murray Stahl – Chairman & Chief Executive Officer

I'd rather not go into the names or the ticker symbols, because we're actually buying the securities. The best way to do it is to describe them more generally.

First of all, obviously hard assets are not only found among energy companies, but they are found in all commodity sectors. I'll give you a generalization about one that applies to all of them. Let's call this a company that produces a certain commodity, but it's a royalty company. Right now, that's the common denominator of all these hard asset companies—they're royalty companies. Royalty companies don't really commit their capital and engage in operations. Some other party operates the facility, whether it's an oil well or a mine or whatever, and the hard asset company gets a royalty.

If you read the annual reports of one of these royalty companies—I have one in mind—if you took the annual report for every year of the last 30 years and lined them up, you would see that 30 years ago, it reported that the reserves for this commodity, among all the operators from whom it receives royalties was X, and that a certain amount of this commodity was produced. Then, the next year's annual report would state that they produced a different quantity of this commodity, and they would also give you the reserves of the next year, Y. Then the following year, a new set of production and reserves figures. And this goes on for decades.

And if you looked at the most recent annual report, for 2021, you wouldn't believe this, but this company actually has more reserves today than 30 years ago. As a matter of fact, for the company that I'm thinking of, I actually wrote this down for my own purposes, because I hardly believed it. I'm not going to give you the number, but I'll give you an order of magnitude. Sometimes I write reports just for myself, not for publication, and this company is one of them, and I identified a number of other companies that are pretty much the same.

Comparing the annual report 30 years ago with this year's, and bear in mind this company has not spent one dollar on capital expenditures, but the reserves are 64.4% higher than they were 30 years ago. You might ask me, how is that even possible? Well, now we get to the heart of the inflation thesis.

Two things are happening. The first is, it's 30 years later. The technology for extracting commodities is better. There were portions of various resources that just were not profitably extractable 30 years ago, but are today. That's part of it.

The other part is that, for the particular commodity I am thinking about, it experienced price inflation of about 4.2% a year, on average. When the reserves are calculated, that figure is determined by how much of the resource is economically extractable. Over time, then, with the combination of a rising price for the commodity and improving technology for getting more of it out of the ground profitably, the operator ends up with more reserves after 30 years than it had in the first place—which are actually, on a proportional look-through basis—reserves of the royalty company. And the royalty company, of course, gets a certain cash flow stream, which is actually quite considerable, and without spending a penny on capital expenditures.

I identified three companies that have that characteristic right now. I think we've identified a fourth, but there's some more research to go. As to Hard Assets I, you know the bulk of what's in there; it's the Texas Pacific Land Corp. The idea of HK Hard Assets II was to raise money and invest in these companies. It's not necessarily even an inflation investment. Of course, a truly inflationary environment would help the investment considerably, but even in the absence of that, the particular investment whose name I would rather not reveal to you since I'm buying it, has done very well. Other than the last few months, we haven't been in an inflationary environment. All this company got is a bit more than 4% a year increase in the price of the commodity, but after 30 years, that adds up to a lot.

So, it turns out you don't really need an inflationary environment to benefit from such hard asset companies. Obviously, if you had an inflationary environment, the price would have gone up by a large magnitude. The costs are going to stay the same. You'd make a lot of money, but you don't need that in order to make a lot of money. Anyway, that's the idea behind Hard Assets II. We've got three definite names that we're buying.

There's a fourth that's highly probable. I don't know how many of these there are in the world. It's not many, possibly you might get to ten, although I doubt it. A lot of income comes out of this, so one of the features of the fund is that the income can be reinvested in more shares. They're not well-known names. Of the three that I'm thinking of, two have literally zero investment management or research coverage. One has a little coverage, but it doesn't get a lot of attention, to be sure.

Then there's another interesting aspect of all three companies. We mentioned reserves, but we came up with the concept of “contingent reserves”. What are contingent reserves? They’re optionality. What happens if the technology improves? What happens if the price goes up? They'll produce a little more.

But there are other contingencies, also. In a lot of places, you'll find not just a lack of investment in the resource itself, the well or the mine, but a lack of investment in surrounding infrastructure to even get these commodities to market. That requires yet other entities to make investments, either a railroad or a pipeline or something else, to enable these commodities to get to market. With the developing worldwide shortages that are being experienced in all commodities, you might actually get that additional investment. When that happens, it's possible that the production might rise even more, apart from the benefit of technology improvements. So, you could say there's a third contingency for value realization.

Lately, rather than using the word "optionality"—it has a probabilistic connotation that I think people interpret in a very bad way—I started using the word "contingency," meaning that in certain circumstances, we can really do very well, although if none of those circumstances materialize, we're still going to do very well. So, I'm really, really excited about Hard Assets II, and time will tell how well it does, but so far, it’s doing rather well, I would say. I only wish I had done this 30 years ago, but I didn't know 30 years ago. Now I know. We're doing interesting things in commodities. I hope you'll understand why I’m not giving you the ticker symbols because everyone will bid them up in front of me and that wouldn’t be doing the shareholders of FRMO any favors. I hope you'll understand why I want to keep that part of it confidential. It'll eventually get big, and I'm going to have to disclose it, so you'll know.

Questioner 10

Regarding investments in limited partnerships and other equity investments from Note 5, would you please briefly describe the respective investment strategy of each of the investments in “managed funds” listed in Note 5?

Murray Stahl – Chairman & Chief Executive Officer

Okay, Note 5. What I need to do is, I need to turn the annual report to Note 5, because I don't memorize every line. I hope you'll understand. Just bear with me for a moment because everything is password-protected now, so I have to put my password into this computer, and it needs to accept it. And now I'll scroll down to Note 5, and I'll go through every fund. Okay, so it says Investments in Limited Partnerships. I'm going to skip Horizon Multi-Strategy, because I'm going to let Steve talk about that fund.

South LaSalle Partners holds shares of MIAX, that's the Miami International Holdings, otherwise known as MIAX, and it's a private company. It's a one-stock private company, and presumably it's going to come public, and we'll see how well we do. You can look at the unrealized gains. Even as a private company, I think we've done reasonably well, but one day it's going to come public.

CDK Partners was started to do two things. It was started to invest in exchanges. South LaSalle was started to invest in exchanges as well, and now it owns one exchange. CDK Partners was investing in a variety of exchanges, and it still does that, but it also had some cash, and we bought some shares of TPL, and we put some crypto in there. Why did we do that? Because we're the only partners, we don’t have any shareholders, so it's our money and we thought it was a good idea, and we did it. So, you could say it has three things in it. We also sold short some path-dependent ETFs.

The Polestar Fund basically also has a holding in TPL, and the three companies that I mentioned that are in HK Hard Assets II, they're being bought every single day in the Polestar Fund, so little by little it's growing. And there's one other security that has nothing to do with Hard Assets. It's just a very undervalued security that you could call a special situation that we're also buying there. And in the Polestar Fund, we do short path-dependent ETFs, and we short some of the path-dependent gold-related ETFs as well.

The Multi-Disciplinary Fund was started to do two things. The approach was to buy bonds and generate supplemental income by writing options. And we came to two conclusions. Number one, interest rates eventually got so low, it didn't make any sense to do a lot of work with bonds, so we got rid of most of the bonds. I think there's one bond that's left in there, and it's probably going to be shorted in a week or two. So, the Multi-Disciplinary Fund, since it's mostly our money anyway, sort of looks a lot like Polestar.

Kinetics Institutional Partners, it does have outside money in it. It has not purchased those commodity royalties that are in the Hard Assets II portfolio. However, it's much more aggressive, as far as that goes, with special situations.

And then there's Shepherd. Shepherd is similar to Kinetics Institutional Partners. It just has a much bigger exposure to cryptocurrency than Kinetics Institutional Partners.

I mentioned all of them aside from Horizon Multi-Strategy, but maybe, Steve, you want to take Horizon Multi-Strategy since you’re managing that fund?

Steven Bregman – President & Chief Financial Officer

Okay. I haven't been doing a lot of managing lately, other than that some people say that sitting on your hands is the most difficult thing to do in management, in which case, I suppose there's effort involved, and that's management.

The Multi-Strategy Fund has become quite concentrated, and not because we ever took the position of saying, let's make a very large position in something. It's not that we wagered that we know enough to take that much capital risk in two positions, but this has come about through the combination of appreciation over a fairly extended holding period, and periodic withdrawals from the Fund. Actually, in the last year or two, there were few withdrawals, almost none, so I guess whoever's in there now either likes what they've got or is resigned to what they've got.

In any case, there are two familiar investments, which comprise a great portion of the assets now: Texas Pacific Land Corp., which is probably just about two thirds of the market value, and bitcoin, through a couple of different kinds of fund instruments. It accounts for another 15% or so, so I'd say 80%-plus of the fund is in those two securities.

A couple of points about that. FRMO Corp. probably owns close to a third of the Fund, so somewhere north of 25% and a bit less than a third is probably FRMO's capital. We're eating the same cooking, and I thought it might be interesting to look at how much we put at risk. It's difficult to know because, again, there have been withdrawals over time, but if we look at the tax cost, the actual cost of these holdings, TPL on a cost basis is probably 6% of market value of the fund, and the bitcoin position is probably, in terms of cost basis, about 2½ % or so.

I'll also tell you that the market values of both, interestingly enough, are just about, give or take a little, 10x their cost. So, that's how that works out. The fund does have participation in a variety of other areas of investments that we like. It's got some base metal royalty holdings and precious metal royalty holdings and interesting securities exchanges. And some of the other bitcoin-derived cryptocurrencies on some of the forks. That's basically what you've got there.

Murray Stahl – Chairman & Chief Executive Officer

By the way, I'll say one more thing about the funds that you'll find interesting. In the funds I'm controlling, I haven't sold anything in large holdings, and nevertheless we're diversifying those funds. You might ask, how are we diversifying those funds? I'll just use HK Hard Assets II as an example. We just wanted to set up a fund. We just wanted to give it life and put something in it so we could pay the administration expenses. So, we took some shares of Texas Pacific that we owned and threw it in there just to give it some life. But we didn't buy any, and we weren't buying any. We were buying other things, so how are we buying these things?

Well, with my personal capital; I was buying these very securities. And I was contributing them to the fund. And these were all high dividend-paying securities. We take the dividends and use them to buy more shares of these or other other investments. And little by little, through reinvestment, you'd be amazed at how rapidly it gets diversified. I would tell you that when we started HK Hard Assets II, the only thing we had in it was some shares of TPL and maybe a few thousand dollars in cash, so TPL started at a 100% weight. We didn't sell one share. Now it's an 80% position and we're gradually diversifying it, theoretically, every day, because we're taking our cash flow and buying other investments. In the fullness of time, it'll be a well-diversified portfolio, at least a lot more diversified than having 100% in one name. If you have patience, you can diversify a portfolio in a very, very gradual exponentially smooth way without trading it, so I hope that provides some insight in what we're up to.

Questioner 11

My understanding is that equity securities have consisted mostly of holdings of Texas Pacific Land Corp. and Grayscale Bitcoin Trust. If this is correct, would you please also describe any other material holdings, or changes to these holdings in the past year?

Murray Stahl – Chairman & Chief Executive Officer

In a way, I just did. There are three holdings that we are buying. For us, it's fairly aggressive. I just don't want to mention the names. At some point, they'll be big enough that I will disclose them. I can just tell you that all three are in the commodities space, and all three are royalty companies, and they pay, at least in my opinion, pretty good dividends, and they're up-and-coming names. There's also one special situation that has nothing really to do with commodities. It's involved in exchanges and some other activities. It's not MIAX, because MIAX is not publicly traded. I just happen to think it's a very undervalued security, and we buy it little by little, and we'll make it a large position. So, there'll be four of them, three in the commodities space, and maybe there might be another one in the commodities space; we have to qualify that one and see if it's what it purports to be. But at the moment, it looks pretty good, even though we haven't bought a share yet. So that's what we're up to.

Steven Bregman – President & Chief Financial Officer

I should respond, as well, to the question about holdings and the Multi-Strategy Fund. Earlier, I had just been perusing the percentage weightings, and I inadvertently glossed over some small weightings. Yet, they are actually strategic investments that could one day be quite large. I dare say that back in 2017 or 2018, when we first bought the Grayscale

Bitcoin Trust position, I might as easily have ignored that, too, on the basis of the weighting at the time, but now it's gone up ten-fold.

One holding in particular that is a strategic investment and which we'll call a new asset class, Murray has spoken to this quite a number of times. It's easy to say the phrase, 'a new asset class,' but if you think about it comprehensively, how odd, how unique is it that one can actually ever come across a new asset class. I mean, there is gold, there is silver, there are stocks, bonds. So, it's actually saying a lot, but the Fund does have an investment in Diamond Standard Inc. Diamonds are or can be significant, as an asset class. It's a very small position, but it could become very large if diamonds develop over time into an accepted asset class in a more generalized way. If you notice, this is the same language that we use about cryptocurrency: acceptance. You know how possession is nine points of the law? Well, acceptance is maybe nine points of whether something is considered an asset class that people want to use, and therefore has the value associated with it.

And there's also a very small position in an ETF, which is an ETF for futures on carbon credits. Carbon credits, too, are very marginal in terms of the world of institutional investing, but also has the potential for an orders of magnitude increase in market capitalization over time, should this effort become a more broadly used and accepted asset class, as opposed to something which, at the moment, is merely a glimmer in the world of possibilities.

Questioner 12

FRMO is an intellectual capital firm, and Mr. Stahl and Mr. Bregman are very expert professional investors. So, I'm trying to pick their brains a bit. They purchased a large amount of a royalty company, and its mines are not being utilized, so its royalties have declined. I'm sure that they were aware of this contingency when they bought shares. How did they think through the purchase, and what do they do now? Think of this question as, what do you do when bad things happen to a good stock?

Murray Stahl – Chairman & Chief Executive Officer

I know what you're referring to, obviously, so let's just put it this way. I'm not so sure that that's such a bad thing, as I've come to understand the sector better over the years. As a matter of fact, I had this discussion with someone just a few days ago, and while they didn't ask exactly the same question, they asked almost the same one. A lot of people phrase the question this way, that you want to have the cash flow be maximized every quarter, you want this resource to be producing, so what happens if it's producing less, maybe even producing nothing? What does that do to the value? Yet, I'm not so sure it doesn't *increase* the value.

Consider it this way: why do I want my asset to be sold right now? Maybe it's worth more to me if you leave it in the ground and mine it next year or two years from now or even five years from now. Why am I in such a rush if I really believe in the inflation hypothesis? Why am I in such a rush to dig out every ounce of this commodity and put it on the world market at today's prices? Maybe the price in the future will be a lot better, so I'm not so sure it's in my personal interest that the production be maximized. I think it's a lot better to leave it in the ground for now if that's indeed what ends up happening. That's how I would answer that question.

I don't think the shareholders are so displeased either, frankly.

Questioner 13

Has FRMO begun investing in quantum computers as a way to hedge FRMO's crypto businesses, the premise being that sometime in the not-too-distant future, quantum computers might be able to crack bitcoin's security layers?

Murray Stahl – Chairman & Chief Executive Officer

I don't think quantum computers are going to crack bitcoin's security layer. Let me explain why that is. Anybody can buy a quantum computer. What is bitcoin's security layer? It is roughly, according to my calculations, two million servers that are validating the transactions in every ten-minute period. So, a conventional computer, how is it going to operate more rapidly than two million servers validating? Obviously, it can't. People quite naturally will reason thusly. They'll say, ah-ha, a quantum computer or maybe even one or two quantum computers, maybe three or four or six quantum computers, there's a certain number of quantum computers that will have such intensive processing power, that they will be able to out-process, so to speak, the two million servers that are now validating transactions. Well, we can also get servers that are quantum computers, so there's no advantage whatsoever that's maintainable. We can all go out and buy a quantum computer, so I don't take that seriously as a threat to crypto.

Questioner 14

FRMO has been a company which has gotten where it is by collecting shares of fees, not operating a business directly. It has been great at that. Now, reading this annual report beginning with the very first sentences, we are as if a crypto company, and yet our assets are minor in crypto, while our annual report message is first and foremost opposite, as it is all crypto.

It reads, "The primary focus of the 2021 Shareholder Letter was cryptocurrency. Fiscal 2021 was a year of significant progress in the evolution of the FRMO cryptocurrency business."

The primary focus of FRMO is not crypto, but it seems crypto was the primary focus for the past two years, all crypto. Why? What is the short and long-range plan? Or do we actually have a plan? Instead of making a hard turn away from what it had been for over 20 years, shareholders deserve a clear explanation and to know the plan and where for and why for, given FRMO did great building its book value yearly at a fast clip, as was discussed in the one letter Mr. Bregman authored and signed. But book value no longer grows or grows much anymore, and the discussion is overwhelmingly crypto, crypto, crypto. And the FRMO stock even seems to act like it is a crypto company. Please discuss and explain. Are we no longer the book value growth machine or the passive collectors of the fees, which come from the fruits of others? That's the question.

Murray Stahl – Chairman & Chief Executive Officer

To start, we're still the collector of the fees. It's just that the upside of crypto, number one, dwarfs anything possible in any asset class. Number two, it's my personal belief that in short order, crypto is going to be a legitimate asset class, and it's going to be in the panoply of assets that you have in asset management. So, it's going to be there.

The problem is that although I believe that, I'm not prepared to bet the enterprise on crypto. I just call people's attention to crypto so you can see, in the balance sheet, what we have in crypto assets. It's a very small fraction of our total assets. It's possible that the entire crypto project could either be a complete failure or largely a failure, so we don't want to put any money in crypto assets beyond what we could afford to lose in its entirety. So, look at what the balance sheet commitment is. If disaster should befall crypto—hope it doesn't; I don't think it will, but it's possible—FRMO will live to fight another day. So, we're not changing the focus of the company, whatsoever. However, we would be remiss in our responsibility if we completely ignored the asset class. Let me go into a little more detail, because it's a lengthy question and it deserves a lengthy response.

The bond asset class is clearly the biggest asset class in the world of asset management by far. It dwarfs equities. The trouble is that, when compared to inflation, the bond asset class worldwide has a negative real rate of return. That's not even open for discussion. Even before the most recent inflationary experience, after taxes, even with low inflation, the bond asset class had a negative real rate of return. So, the biggest asset class in the world of asset management, even in the absence of inflation, even when we had 2% or 3% inflation, wasn't functioning the way it historically had.

Historically, the bond asset class earned a positive real rate of return. We haven't earned a negative real rate of return in the fixed income asset class in many, many years. So, cryptocurrency came about as an opportunity. It's so revolutionary in the world of asset management that I feel I'd be remiss if I didn't call people's attention to that. But it doesn't mean you stop doing other things. It's just that it's so unique and it's so different, we just can't responsibly, within the scope of the annual report, explain it in a paragraph or two. It requires—and merits, because it's interesting in its own right—a substantial amount of explanation. And it promises to revolutionize society, as I talked about earlier, because it's more than just a new asset class. It's that the balance of power in society now, at least in financial society, is going from the hierarchical structure to anybody who can mine crypto.

Consider a central bank. The central bank creates the fiat currency. But anybody who wants to can create a cryptocurrency. That's a revolution. And no matter who creates a cryptocurrency or no matter who mines an existing cryptocurrency like bitcoin, in the world of bitcoin we know exactly, at any point in time, how many units there are and how many units there are going to be. Therefore, we know the inflation rate.

The world, you could say, at least the world as far as the United States is concerned, changed radically in our Civil War, because the dollar that we came to know was not a government-issued security until the Civil War. The Civil War had to be financed. It couldn't be financed by taxes, because if you think about it, the U.S. lost a big portion of its tax revenue when half the country defected. Another large part of the country, the working part, was in the military and they weren't making a lot of money, so you couldn't very well tax them. The demands of the military, in terms of supplies and the wherewithal of war, was just enormous. It dwarfed whatever was possible to raise by tax revenue previously. There was only a certain taxing capacity, only a certain borrowing capacity, so they issued something called the greenback.

What was the greenback? The greenback was a government note, and obviously called a greenback because one side of it was green. It was just a note that paid no interest. In theory, what was it redeemable for? It had no maturity date, by the way. It was redeemable, theoretically, for gold, but not in practice, because there was no requirement by the federal government to actually redeem it for gold. Maybe you have a dollar or any denomination of dollars of fiat currency in your pocket, pull it out, and what does it say there? It says on each and every piece of paper, "Federal Reserve Note," which is just a liability that never matures. That was a revolution in finance. It didn't exist previously, at least not in the U.S., and it came to be that paper, even though it was no longer convertible into gold.

Today's paper currency still has no maturity date and it became the biggest asset class. Why? Because the U.S. government changed the law, and said this is legal tender. You could use this to discharge your debts. So, if you had debt denominated in gold on a nominal basis, if you're in the military and you had a mortgage on your farm, and they gave you greenbacks, you could pay your mortgage with the greenback. That's why people took it.

Maybe you could say that the world went too far with paper currency, and now we're at another crossroads—just like we were at in the Civil War—in the revolution of finance. It's now crypto. That's why I call people's attention to it, but just because we use a lot of words and it occupies a lot of space in the annual report, it does not, therefore, logically follow that the bulk of our assets or the bulk of our effort to earn money is going to be in the field of cryptocurrency. The proof of it is right there in the balance sheet. There's a line there. It says “cryptocurrency,” and you can see how much money is in there, and you see, by comparison, the shareholders’ equity is, which incidentally, if I'm not mistaken, is at an all-time record high. So, I think there's a lot to be happy about, but I hope you don't reach the conclusion that we're going to become a cryptocurrency company. We'll eventually, hopefully have a cryptocurrency operating business, but we're not going to become a cryptocurrency company. At least, that's not our intention. I hope that's a thorough answer to your question, but if we need more data, tell me and I will provide it.

Questioner 15

Would you please talk about the current situation with bitcoin mining economics and profitability, and about cryptocurrency generally and the company's respective investments in crypto-related entities, businesses, and assets? Would you please describe your view on what's happened in the industry, particularly over the past few months, and your outlook for the industry and the company's various crypto-related investments?

Murray Stahl – Chairman & Chief Executive Officer

If I may go back that far, I'll go back to more like, 24 months or even 30 months. Basically, there were a variety of publicly traded companies that raised enormous sums of capital, at least by cryptocurrency standards. Some of them raised literally billions of dollars. And what did they do? They decided to invest almost all of it in cryptocurrency mining equipment, otherwise known as rigs.

You had all that money being invested in rigs in a very, very short period of time. The result was something that never happened before in the field of cryptocurrency, but it shouldn't have been surprising. They drove the prices of the rigs up. I'm going to look up the actual figures for you. There's a database called the Luxor ASIC Price Index. If you go there, you'll see these time periods somewhere in the right-hand corner. I'm going to click on ‘all,’ so you can do it with me. Look back in March, April, May, certainly February, of 2021, which is not that long ago. You'll see what happened to prices of crypto rigs. It's astounding, but in round numbers, the price of rigs increased, estimating from this graph, not far from five-fold. That's an estimate, but you can actually calculate precisely from the data points, if you go to the website.

That did a couple of things. First of all, it's ridiculous, but they essentially raised the cost, their own cost as well, obviously, of mining cryptocurrency, because the cost of the rigs increased. You might recall in prior meetings that we said we're not buying rigs. Now you know the reason why, particularly if you look at that graph. But of course, that approach was unsustainable. How did we know it's unsustainable? Because, as a matter of pure business economics, there's the halving.

Measured from today, we're roughly 602 days away from the next bitcoin halving. What is the halving? That is when the block reward gets cut in half. As a miner, your revenue, if you have the same number of machines and none of them break, is going to be cut in half, but your expenses are going to be the same. So, to pay that kind of money for the machines made no economic sense, whatsoever. It completely distorted the bitcoin mining business. And now we're at the point where the prices of the machines are declining, as they must, as they had to. So, when the prices of machines decline, what happens? The cost of mining declines, and it becomes cheaper to mine.

The price of the equipment has to fall at least as rapidly as the halving, meaning a 50% reduction in your block reward. I think it's going to fall by even more than that. That's in the process of happening, so the mining business is doing very well, even though what these companies did collectively was very disruptive.

From the point of view of our mining business, we really have, just to remind you, a couple of them. We have the FRMO mining operations, with our own servers. And we have invested in two publicly traded companies. One is Consensus Mining. That's the outgrowth of the original HK Cryptocurrency Mining I and II entities. We also have an investment in Winland Holdings. We own about 29% or 30%, and the precise figure is in the Shareholder Letter. The publicly traded crypto mining companies did us a great favor, a great favor.

I'll just use Winland as the example. You might recall that a little more than two years ago, I think it's about 27 months, FRMO bought some servers and we sold them to Winland in exchange for Winland stock. The price we paid for the servers back then—notice today we're 27 months closer to the halving—was, believe it or not, only a bit more than half of what it would cost if we bought the exact same servers today. But our policy is to depreciate the servers over the course of 36 months. We're 27 months into it, so we have very little economic value left. We bought those servers on the premise that at the end of 36 months, they would no longer be productive. However, they're actually very productive, because those big crypto mining companies are depreciating all those servers over five years. They've got to make them last for five years. So, they're delaying purchasing the new generation equipment. What's going to happen is, we're going to get at least two years, maybe more than two years, of life that we didn't expect to get from machines that are fully depreciated.

So, they did us a great favor, and I thank them accordingly for doing that. I don't know if they're going to do it again. My guess is they probably won't and that they've learned their lesson, but from the point of view of FRMO, from the point of view of Winland, and from the point of view of Consensus Mining, they did us a favor.

I will also mention HM Tech, the private company we own a little over 7% of. Horizon Kinetics owns over 50%. Even though it's a hosting company, HM Tech also repairs machines. If you run these machines constantly, a lot of them break down and need repairs. Because the various mining companies are making these machines run a much longer term than their planned useful life, there are a lot of repairs that need to be done. The repair business is very robust, so they did us a favor in that regard as well. So, we're very happy with the current environment in crypto.

What we're going to do is, buy a handful of machines, not very many, in the next six months or so, but we're not going to buy bitcoin machines. We're going to buy Litecoin machines. Specifically, we're going to buy the L7. The reason is because Litecoin is roughly 330 days away from its halving. And because the halving is so close, now less than a year, the machine prices have declined sufficiently they'll still be fairly profitable even after the halving. A bitcoin miner, if you were to buy today, would have to last more than the 602 days to the halving in order to break even, but it won't be profitable subsequent to the halving, unless the bitcoin price goes up. So, at least for the time being, we're not buying any bitcoin machines. We're buying Litecoin machines. I hope that's a reasonably thorough update.

Questioner 16

How would you suggest that an owner of bitcoin who does not want to self-custody store it? For example, one could buy bitcoin in Coinbase and use their cold storage service, but the blockchain development ETF does not own Coinbase, which makes one wonder about your thoughts on Coinbase's prospects.

Murray Stahl – Chairman & Chief Executive Officer

I'm not sure if the question is about storing bitcoin or about Coinbase, so I'll just answer both. You're asking me why I don't own Coinbase and how you would store bitcoin. If you have a lot of crypto, you might want to consider a custodian. There are a few of them out there. One custodian that we use is NYDIG. We're very happy with that NYDIG's work, so I'll give them a little free advertising.

There are also various self-storage devices. There's the Ledger. That's one device. And there's another one called Arculus. I have never used it, but from the people I know who have used it, they've used it very satisfactorily. I've seen it work. We happen to use Ledger. We haven't tried the Arculus. It looks like a credit card, but it's a self-storage device. So, there are ways to store cryptocurrency without using Coinbase.

The issue for Coinbase—now I'm getting into why I didn't buy it—has nothing to do with storage and custody. The impediment, or the next impediment, to crypto becoming a legitimate asset class is the issue of exchange and the spot cash price. From an SEC point of view—I really shouldn't speak for the SEC, but I will—the basic problem is, if you were to license an ETF, and because the ETF takes in flows during a day and can actually redeem, how is the fund operator going to calculate the NAV for redemption or admission purposes?

In stocks, that's not a problem because the exchanges, like the New York Stock Exchange, are self-regulatory organizations, meaning they have the power to prevent people from trading. The New York Stock Exchange has the power to fine people and administer those fines. You could say the NYSE is sort of "deputized," so to speak, by the SEC, to take action against someone who engages in, let's say, spoofing or wash sales. In a wash sale, two counterparties trade the same security back and forth to create prices, to create information on the tape, but money doesn't actually change hands; they're just reporting prices. That also goes on in crypto. The only way to know for sure that that is not going on is, trades, or at least a lot of them, have to go through a regulated exchange. And the exchange in SEC terminology is known as a self-regulatory organization, an SRO.

At the moment, even though there are bitcoin futures—for example, the CME has bitcoin futures—we don't yet have a cash market, a spot cash market, in bitcoin. From an SEC point of view, that's an issue and I actually agree with them. Some people will argue that the futures price is a proxy for the cash price. It's an argument that I don't think the SEC agrees with. I, also, have not agreed with it. To a degree, it's a legitimate argument, because you have to formulate a price off which to base the future. So implicitly, there's a cash price. But the problem is, you only have an approximate price, not an exact price for an ETF settlement. And if you don't have an exact price, it's possible that if the ETF is mispriced in relation to what we think, but do not know, is the exact proxy for the cash price, an arbitrage might develop, and some very sophisticated traders might take advantage of the general public. Of course, the SEC can't allow that, and therefore, has thus far not licensed a bitcoin ETF. That's the logic.

My personal belief is that before 12 months will have elapsed, we will have at least one and quite possibly two exchanges that will make a spot market in bitcoin. What does it have to do with Coinbase? Coinbase says it's an exchange, but it's not an exchange. An exchange gets a license from the SEC, and there are certain administrative and regulatory enforcement responsibilities delegated from the Securities and Exchange Commission. Technically speaking, none of the so-called bitcoin exchanges—of which there are many, Coinbase being only one—even have the right to call themselves exchanges under American law. They're merely brokers. And you might say, even as a broker, what's wrong with that? Well, there's nothing wrong with being a broker, except that it's conceivable that in regulating the crypto asset class, because there's a blockchain and the reliability of the transactional integrity is so high, the SEC might allow what's referred to as naked access.

In other words, if you want to buy shares of XYZ Corporation, you personally can't go to the New York Stock Exchange and buy shares of XYZ Corporation. You have to go through a broker, meaning an intermediary. In the world of stocks, there is no such thing as naked access. It's possible that crypto could evolve on a naked access model. If it does, people would be able to access the exchange directly, and there won't be a need for the intermediaries. Therefore, it's a risk, to me, to own any intermediary. It doesn't mean that the regulations are going to evolve that way. They might not, but it could happen, and I'm not prepared to take that risk. Therefore, I haven't bought Coinbase.

Secondarily, I thought the valuation was very high, but that was the secondary reason.

Thérèse Byars – Corporate Secretary

We'll need to make this our last question, since we have a five o'clock cut-off.

Questioner 17

In the previous conference call, management commented on bitcoin's relation to Gresham's law, subsequent hoarding behavior, and the lack of any need for a mere scalable bitcoin network. By a similar economic law, Thier's law, when there is no enforcement of like treatment between different currencies, which was not the case in 16th century England's Great Debasement that management has cited in the past, wherein coins were gradually stripped of their precious metals content while still decreed to be worth the same nominal value of any other coins. Then good money drives out or is used versus the bad, which is the opposite of Gresham's law. Could management comment on why they believe the present conditions are such that Gresham's law applies in the case of bitcoin as opposed to Thier's law, where bitcoin hoarding would actually be seen as a failure?

Murray Stahl – Chairman & Chief Executive Officer

Thier's law refers to a gentleman who was a politician in the late 18th century France. What they did, essentially, is make debased coin legal tender. You had to accept it at face value. So, why wouldn't people use that? In the case of bitcoin, the reason I say it's mimicking

Gresham's law is because the empirical evidence suggests it. To view the empirical evidence, go on a blockchain explorer—I would recommend Bitinfocharts.com, or there are others—click on bitcoin, you'll look down at a menu and you'll see something called The Rich List, which displays the wealth concentration. You can see what percent of the coins are owned by a handful of addresses on the blockchain, and that's in real time. And you will see that it's very concentrated. Now, again, I'm doing this from memory, so it will be a little off, but I would submit to you that 86% of the coins are probably owned by 100,000 addresses and 100,000 addresses, I would guess, is 20,000 people. Why do I say 20,000 people? Because a lot of people have multiple addresses. We have multiple addresses on the blockchain. We don't keep everything on one address. Anyway, you can see the ownership concentration there in real time.

Any time the empirical data on bitcoin ownership moves from a Gresham's law circumstance to a Thier's law circumstance, you will see it in real time. You can look at it now or you can look at it tomorrow, it will always be there. That's one of the reasons I like crypto so much, because you never have to guess. Everything is open source. Everyone knows everything in real time. Maybe there's a 10-minute delay, because of the block update, but you have current information.

That doesn't happen in the fiat money world. There isn't the transparency and the information in the fiat money world, so you might be thinking about inflation or the different kinds of securities that governments can issue that function like money, even though it really isn't money, except that you don't really know what the central banks are doing with the assets that are on their balance sheet.

In crypto, you know everything. For example, if you were sufficiently intrigued to wish to look at the transactions of the largest holder of bitcoin, you could do so, and you could see each and every transaction from the first to the last. It will never be erased. You can look at it if you want to. Anyway, there it is, so it's clearly a Gresham's law circumstance. That's the empirical evidence. Theoretically, it could change, but we'll know, so we don't have to speculate.

Thérèse Byars – Corporate Secretary

That was our last question for today, and I just wanted to thank you and Steve for an excellent meeting. And I'll leave it to you to close the meeting.

Murray Stahl – Chairman & Chief Executive Officer

All right, well, thank you. First of all, let me ask you. Did we answer each and every question or do we just have a hard five o'clock cut-off for our meeting?

Thérèse Byars – Corporate Secretary

We have a hard five o'clock cut-off.

Murray Stahl – Chairman & Chief Executive Officer

So, there are other questions coming in? I want to get to every question asked, so if there are enough of them, why don't we do this? If there are enough remaining questions, let's reprise this call. For the moment, since they're going to cut our phone off soon, it remains for me to just say thank you so much for your support over all this period of time. I thought the questions were outstanding, and I hope we give the impression, which is truthful, that we love answering the questions. They actually make us think, and I hope this doesn't come as a surprise, but we don't know the answer to every question. We ourselves are researchers. We're still learning. And that's what makes investments such an interesting business, that you learn something every day. That's why you want to get up in the morning and do it. That's what makes it fun, so I hope it's clear that we take this really seriously. We enjoy what we're doing. We're dedicated to the task. Thanks for the support and we're always open. We want to be as transparent as possible. Keep asking questions, and we'll do our best to get you the information and the answers that you want. So, with that, I'll just say thanks for listening, and good afternoon.

Operator

This now concludes the meeting. Thank you for joining and have a pleasant day.